

*A1
concl'd*

connected to a second AC network with a second frequency f_2 , [characterized in that] wherein the converter [also] comprises [a] rotor means which rotates in dependence of the first and second frequencies f_1 , f_2 , and [in that at least] wherein at least one of said stators [each] comprises at least one winding, including [wherein each winding comprises] at least one current-carrying conductor, and [each winding comprises] an insulation system including [, which comprises on the one hand] at least two semiconducting layers, wherein each layer forms a [constitutes] substantially [an] equipotential surface, and [on the other hand between them is arranged] a solid insulation located between the first and second layers.

Claim 2 (Amended), line 2, delete "characterized in that" and insert

--wherein--.

Claim 3 (Amended), line 2, delete "characterized in that" and insert

--wherein--.

Sub (c2)
A2

Claim 4. (Amended) The rotating asynchronous converter according to [Claim 2 or 3, characterized in that] claim 1, wherein an outer one of said layers is arranged to constitute substantially an equipotential surface surrounding said conductor.

Claim 5 (Amended), line 2, delete "characterized in that" and insert

--wherein--.

Claim 6 (Amended), line 2, delete "characterized in that" and insert

--wherein--.

Sub (3)

Claim 7. (Amended) The rotating asynchronous converter according to [any one of the Claims 1, 2, 3, 4, 5, or 6, characterized in that] claim 1, wherein at least two of said layers have substantially equal thermal expansion coefficients.

A3

Claim 8. (Amended) The rotating asynchronous converter according to [any one of the preceding claims, characterized in that] claim 1, wherein said current-carrying conductor comprises a number of strands, only a minority of said strands being non-isolated from each other.

Claim 9. (Amended) The rotating asynchronous converter according to [any one of the preceding Claims, characterized in that] claim 1, wherein each of said two layers and said solid insulation is [fixed] fixedly connected to adjacent layer or solid insulation along substantially the whole connecting surface.

Claim 10. (Amended) A rotating asynchronous converter for connection of AC networks with equal or different frequencies, wherein the converter comprises a first stator connected to a first AC network with a first frequency f_1 , and a second stator connected to a second AC network with a second frequency f_2 , [characterized in that] wherein the converter [also comprises] further comprises rotor means which rotates in dependence of said first and second frequencies f_1 , f_2 [and] in that]said stators each comprise[s] at least one winding, wherein each winding comprises a cable comprising at least one current-carrying conductor.

Claim 11 (Amended), line 2, delete "characterized in that" and insert
--wherein--

Sub C4
Claim 12 (Amended), line 2, delete "characterized in that" and insert

--wherein--

cont.
A4
Claim 13. (Amended) The rotating asynchronous converter according to [any one of Claims 1-12] characterized in that] claim 1, wherein said rotor means comprises two electrically and mechanically connected rotors, which are concentrically arranged in respect of said stators.

Claim 14 (Amended), line 2, delete "characterized in that" and insert

--wherein--

Claim 15 (Amended), line 2, delete "characterized in that" and insert

--wherein--

Sub C4
cont.
A5
Claim 16. (Amended) The rotating asynchronous converter according to [any one of Claims 1-11, characterized in that] claim 1 wherein said rotor means comprises a single [only one] rotor concentrically arranged in respect of said stators.

Claim 17 (Amended), line 2, delete "characterized in that" and insert

--wherein--

Claim 18 (Amended), line 2, delete "characterized in that" and insert

--wherein--

Claim 19 (Amended), line 6, delete "characterized in that" and insert

--wherein--

Claim 20 (Amended), line 5, delete "characterized in that" and insert

--wherein--

Claim 21 (Amended), line 2, delete "characterized in that" and insert ✓

--wherein--

Claim 22 (Amended), line 2, delete "characterized in that" and insert ✓

--wherein--

Sub C4)
Cont.
A6
Claim 23. (Amended) The generator device according to [Claim 21 or 22,
characterized in that] claim 21, wherein an outer one of said layers is arranged to
constitute substantially an equipotential surface surrounding said conductor.

Claim 24 (Amended), line 2, delete "characterized in that" and insert ✓

--wherein--

Claim 25 (Amended), line 2, delete "characterized in that" and insert ✓

--wherein--

Claim 26 (Amended), line 2, delete "characterized in that" and insert ✓

--wherein--

Sub C4)
Cont.
A7
Claim 27. (Amended) The generator device according to [any one of Claims
20-26, characterized in that] claim 20, wherein said current-carrying conductor
comprises a number of strands, only a minority of said strands being non-isolated
from each other.

Claim 28. (Amended) The generator device according to {any one of claims
20-27, characterized in that} claim 20, wherein each of said two layers and said solid
insulation is fixed connected to adjacent layer or solid insulation along substantially
the whole connecting surface.

Claim 29 (Amended), line 5, delete "characterized in that" and insert

--wherein--.

Claim 30 (Amended), line 2, delete "characterized in that" and insert --

wherein--.

Claim 31 (Amended), line 2, delete "characterized in that" and insert

--wherein--.

Sub (5) Claim 32. (Amended) The generator device according to [any one of Claims

20-31, characterized in that] claim 29, wherein said rotor means comprises two

A8 electrically and mechanically connected rotors, wherein said rotors are hollow and
arranged concentrically around said stator and said cylindrical rotor.

Claim 33 (Amended, line 2, delete "characterized in that" and insert

--wherein--.

Claim 34 (Amended), line 2, delete "characterized in that" and insert

--wherein--.

Claim 35. (Amended) The generator device according to [any one of Claims

20-31, characterized in that] claim 29, wherein said rotor means comprises a first

A9 rotor and a second rotor, which rotors are electrically and mechanically connected,
wherein said first rotor is hollow and arranged concentrically around said first
cylindrical rotor, and said second rotor is cylindrical.

Claim 36 (Amended), line 2, delete "characterized in that" and insert

--wherein--.

A10

Claim 37 (Amended, line 2, delete "characterized in that" and insert
--wherein--.

Claim 38. (Amended) The use of a rotating asynchronous converter in accordance with [any one of Claims 1-19] claim 1 for connection of [not] non- synchronous three phase networks with equal rating frequencies.

Sub B1

Claim 39. (Amended) The use of a rotating asynchronous converter in accordance with [any one of Claims 1-19] claim 1 for connection of three phase networks with different frequencies.

Claim 40. (Amended) The use of a rotating asynchronous converter in accordance with [any one of Claims 1-19] claim 1 as a series compensation in long distance AC transmission.

Claim 41. (Amended) The use of a rotating asynchronous converter in accordance with [any one of Claims 1-19] claim 1 for reactive power compensation.

Add new claims 42-54 as follows:

All contd

--42. A rotating asynchronous converter employing a high voltage electric machine comprising a stator, a rotor and a winding, wherein at least one of said windings comprises a cable including at least one current-carrying conductor and a magnetically permeable, electric field confining cover surrounding the conductor, said cable forming at least one uninterrupted turn in the corresponding winding of said machine.

Sub C7

43. The converter of claim 42, wherein the cover comprises an insulating layer surrounding the conductor and an outer layer surrounding the insulating layer, said outer layer having a conductivity sufficient to establish an equipotential surface around the conductor.

44. The converter of claim 42, wherein the cover comprises an inner layer surrounding the conductor and being in electrical contact therewith; an insulating layer surrounding the inner layer and an outer layer surrounding the insulating layer.

45. The converter of claim 44, wherein the inner and outer layers have semiconducting properties.

46. The converter of claim 42, wherein the cover is formed of a plurality of layers including an insulating layer and wherein said plurality of layers are substantially void free.

47. The converter of claim 42, wherein the cover is in electrical contact with the conductor.

48. The converter of claim 47, wherein the layers of the cover have substantially the same temperature coefficient of expansion.

49. The converter of claim 42, wherein the machine is operable at 100% overload for two hours.

Sub C8

50. The converter of claim 42, wherein the cable is operable free of sensible end winding loss.